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09/139,709	08/26/1998	SHOJI KIKUCHI	1232-4465	5642

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EXAMINER

WALLERSON, MARK E

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 11/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/139,709	Applicant(s) Kikuchi
Examiner Mark Wallerson	Art Unit 2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on Sep 9, 2002

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-32 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-32 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

4) Interview Summary (PTO-413) Paper No(s). _____

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

6) Other: _____

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Part III DETAILED ACTION

Notice to Applicant(s)

1. This action is responsive to the following communications: amendment filed on **9/9/2002**.
2. This application has been reconsidered. Claims 1-32 are pending.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 1-32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claims 1, 14, 24, 27, and 32, there is no disclosure in the original claims of “non-control print software” and “non-control read software”. Applicant’s disclosure tends to contradict this amended subject matter. For instance, on page 14, lines 17-22 of the original specification, Applicant discloses that **the read software “processes the received data” and “displays an image on a CRT display”**. This CLEARLY indicates that at least the read software control processes. Applicant has provided alleged support for this newly added subject matter in

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by pointing to elements "21", "23", and "24". However, figure 1 and these elements **do not** provide support for "non-control print software" and "non-control read software".

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 2, 4, 5, 24, 25, 26, 27, 28, 30, and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et. al. (hereinafter referred to as Kaneko) in view of Sakurai (U. S. 5,924,802) and Matsumoto et. al. (hereinafter referred to as Matsumoto) (U. S. 6,301,611).

With respect to **claims 1, 2, 4, 5, 24, 25, 26, 27, 28, 30, and 32**, Kaneko discloses a composite system (printer/scanner) including a first apparatus (which reads on Main Body of Device) (figure 3) having convertible options (101 and 102) to function as a printer (101) and a reader (102), and an information processing apparatus (11), a detection device (4) for detecting the option (printer or scanner) installed on the first apparatus (column 4, lines 25-30).

Although Kaneko discloses that various parameters regarding the image recording and reading are inputted from the image processing apparatus (11) (column 4, lines 64-67), Kaneko differs from claims 1, 2, 4, 5, 24, 25, 26, 27, 28, 30, and 32 in that he does not clearly disclose

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print and read software stored on the image processing apparatus and launching either the print or read software depending on the selected option detected by the detection device.

Sakurai discloses a printer and control method wherein a host computer (100) stores algorithm or drivers (launching means) for a printer (column 5, lines 54-59) and an option device (scanner) (column 3, lines 36-41, column 6, lines 59-67, column 8, lines 44-67, and column 9, lines 14-34), and launches either the print or scanner (option device) software depending on the selected option detected by the detection device (column 9, lines 14-34 and column 8, lines 48-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein print and read software is stored on the image processing apparatus and launched depending on the selected option detected by the detection device. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the teaching of Sakurai so that changes of settings in the printer would not have to be performed as disclosed by Sakurai in column 8, lines 44-48. This enables printing and reading corresponding to a variety of option units.

Kaneko as modified also differs from claims 1, 2, 4, 5, 24, 25, 26, 27, 28, 30, and 32 in that although he discloses sending the scanned image to the PC (column 5, lines 7-32), he does not clearly disclose allowing displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed, and that the software is application software.

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Matsumoto discloses a communications apparatus having means for sending scan information to a host (column 3, lines 56-65), and means for executing scan or print application software based on a selected scan or print operation (column 12, lines 15-30 and column 16, lines 23-29). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified to allow displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed and to execute the application software based on the selected operation. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified by the teaching of Matsumoto in order to improve operator control.

With respect to **claim 3**, Kaneko discloses that the detection device (4) is provided in the first apparatus (figure 3), and when the detection device (4) detects that the installed option is the reader (scanner) option, the detection device (4) outputs a first signal indicative of the attachment of the reader cartridge (which reads on a signal from gate circuits 81 and 83) (column 5, lines 61-67) to the launching means (host computer) (column 5, lines 31-37).

With respect to **claim 6**, Kaneko discloses that the detection device (4) is provided in the first apparatus (figure 3), and when the detection device (4) detects that the installed option is the printer option, the detection device (4) outputs a second signal indicative of the attachment of the printer cartridge (which reads on a signal from gate circuits 82 and 84) (column 5, lines 54-60) to the launching means (host computer) (column 5, lines 31-37).

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With regard to **claim 7**, Kaneko discloses that the option is installed by mounting a print cartridge (101) or a reader cartridge (102) to a carriage of the first apparatus (column 1, lines 17-24 and column 3, lines 27-35).

With respect to **claim 8**, Kaneko discloses that the print cartridge is an ink-jet print cartridge (column 2, lines 58-62).

With regard to **claim 9**, Kaneko discloses that the reader cartridge uses LEDs as a light source (column 3, lines 36-52).

With respect to **claim 10**, Kaneko discloses that a color separation (by use of color filters) method for reading a color image is adopted for reading a color image by the read cartridge is frame sequential method for reading the color image by sequentially turning on each LED (column 3, lines 36-52, column 6, lines 55-63, and column 7, lines 8-20).

With regard to **claims 11 and 12**, Kaneko differs from claims 11 and 12 in that he does not clearly disclose that the first apparatus is a printer or scanner. However, Sakurai discloses that the first apparatus may be a printer (50) or a scanner (column 9, lines 10-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein the first apparatus is a printer or scanner. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the teaching of Sakurai in order to be able to apply the optional device to a plurality of main devices as disclosed by Sakurai in column 9, lines 10-13.

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With respect to **claim 29**, Kaneko discloses that when the detection device (4) detects that the installed option is the reader (scanner) option, the detection device (4) outputs a first signal indicative of the attachment of the reader cartridge (which reads on a signal from gate circuits 81 and 83) (column 5, lines 61-67).

With respect to **claim 31**, Kaneko discloses that when the detection device (4) detects that the installed option is the printer option, the detection device (4) outputs a second signal indicative of the attachment of the printer cartridge (which reads on a signal from gate circuits 82 and 84) (column 5, lines 54-60).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko in view of Sakurai and Matsumoto as applied to claim 1 above, and further in view of Minamizawa (U. S. 6,065,074).

With respect to claim 13, Kaneko as modified differs from claim 13 in that he does not clearly disclose that the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms.

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Minamizawa discloses a multi-functional peripheral device (1) connected to a computer (2), wherein the multi-functional peripheral device (1) comprises a printer (39) and a scanner (38), and a task is selected based on the user (column 2, line 50 to column 3, line 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified wherein the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified by the teaching of Minamizawa in order to be able to execute simultaneous functions as disclosed by Minamizawa in column 1, lines 19-21.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 14, 15, 16, 17, 18, 19, 20, 21, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko (U. S. 6,134,030) in view of Sakurai (U. S. 5,924,802) and Matsumoto (U. S. 6,301,611).

With respect to **claim 14**, Kaneko discloses an apparatus (printer/scanner) (figure 3) having convertible options (101 and 102) to function as a printer (101) and a reader (102), which

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realizes a composite system (which reads on Main Body of Device) (figure 3) in combination with an information processing apparatus (11), a detection device (4) for detecting the option (printer or scanner) installed on the first apparatus (column 4, lines 25-30), and output means (figure 4) for outputting a signal indicative of the installed option detected by the detection device (4) (column 5, lines 54-67).

Although Kaneko discloses that various parameters regarding the image recording and reading are inputted from the image processing apparatus (11) (column 4, lines 64-67), Kaneko differs from claim 14 in that he does not clearly disclose that the print and read software are stored on the image processing apparatus.

Sakurai discloses a printer and control method wherein a host computer (100) stores algorithm or drivers (launching means) for a printer (column 5, lines 54-59) and an option device (scanner) (column 3, lines 36-41, column 6, lines 59-67, column 8, lines 44-67, and column 9, lines 14-34), and launches either the print or scanner (option device) software depending on the selected option detected by the detection device (column 9, lines 14-34 and column 8, lines 48-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein print and read software is stored on the image processing apparatus. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the teaching of Sakurai so that changes of settings in the printer would not have to be performed as disclosed by Sakurai in column 8, lines 44-48. This enables printing and reading corresponding to a variety of option units.

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Kaneko as modified also differs from claim 14 in that although he discloses sending the scanned image to the PC (column 5, lines 7-32), he does not clearly disclose allowing displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed, and that the software is application software.

Matsumoto discloses a communications apparatus having means for sending scan information to a host (column 3, lines 56-65), and means for executing scan or print application software based on a selected scan or print operation (column 12, lines 15-30 and column 16, lines 23-29), and outputting a signal indicative of which software should be launched (which reads on executing scan or print control) (column 12, lines 15-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified to allow displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed and to execute the application software based on the selected operation. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified by the teaching of Matsumoto in order to improve operator control.

With respect to **claim 15**, Kaneko discloses that when the detection device (4) detects that the installed option is the reader (scanner) option, the detection device (4) outputs a first signal indicative of the attachment of the reader cartridge (which reads on a signal from gate circuits 81 and 83) (column 5, lines 61-67).

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With respect to **claim 16**, Kaneko discloses that when the detection device (4) detects that the installed option is the printer option, the detection device (4) outputs a second signal indicative of the attachment of the printer cartridge (which reads on a signal from gate circuits 82 and 84) (column 5, lines 54-60).

With regard to **claim 17**, Kaneko discloses that the option is installed by mounting a print cartridge (101) or a reader cartridge (102) to a carriage of the first apparatus (column 1, lines 17-24 and column 3, lines 27-35).

With respect to **claim 18**, Kaneko discloses that the print cartridge is an ink-jet print cartridge (column 2, lines 58-62).

With regard to **claim 19**, Kaneko discloses that the reader cartridge uses LEDs as a light source (column 3, lines 36-52).

With respect to **claim 20**, Kaneko discloses that a color separation (by use of color filters) method for reading a color image is adopted for reading a color image by the read cartridge is frame sequential method for reading the color image by sequentially turning on each LED (column 3, lines 36-52, column 6, lines 55-63, and column 7, lines 8-20).

With regard to **claims 21 and 22**, Kaneko differs from claims 21 and 22 in that he does not clearly disclose that the first apparatus is a printer or scanner. However, Sakurai discloses that the first apparatus may be a printer (50) or a scanner (column 9, lines 10-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein the first apparatus is a printer or scanner. It would have been obvious

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to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the teaching of Sakurai in order to be able to apply the optional device to a plurality of main devices as disclosed by Sakurai in column 9, lines 10-13.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko in view of Sakurai and Matsumoto as applied to claim 14 above, and further in view of Minamizawa (U.S. 6,065,074).

With respect to claim 23, Kaneko as modified differs from claim 23 in that he does not clearly disclose that the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms.

Minamizawa discloses a multi-functional peripheral device (1) connected to a computer (2), wherein the multi-functional peripheral device (1) comprises a printer (39) and a scanner (38), and a task is selected based on the user (column 2, line 50 to column 3, line 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified wherein the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms. It would

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have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified by the teaching of Minamizawa in order to be able to execute simultaneous functions as disclosed by Minamizawa in column 1, lines 19-21.

Response to Arguments

13. Applicant's arguments filed 9/9/2002 have been fully considered but they are not persuasive.

Applicant submits that the cited reference(s) do not disclose "launching means for automatically launching either the print software or the read software installed in the information processing apparatus depending upon the selected or installed option detected by said detection device". The Examiner respectfully disagrees.

Sakurai teaches a printer and a control method for the printer wherein a controller (8) in the printer (*which reads on controller (17) of the instant invention*), obtains information pertaining to the identification of an option device (unit) connected to the printer (column 4, lines 4-13) from an ID-ROM controller (10). This option device ID information is then transmitted to the host computer (column 4, lines 47-49 and column 5, lines 21-43). A printer driver (print software) is then activated (which reads on launched) based on the device ID (column 6, lines 35-48). When an optional device is connected to the printer, the printer changes its device ID, the computer reads the new device ID and selects a printer driver (software) corresponding to the

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optional device of the printer, based on the read device ID (column 6, lines 59-67), wherein the optional device may be a printing unit or a scanner (column 3, lines 36-41).

The Examiner interprets “automatic” to be without user or operator intervention or control. In the instant invention software (22) in the host computer allows the launching of print or read software depending on the detected option device, while Sakurai also discloses means (algorithm) for activating (launching) a driver (software) (column 6, lines 35-48 and column 12, lines 15-22) depending on the detected optional device (column 6, lines 59-67). There is no indication in Sakurai that the driver/software change is being controlled by a user or operator. Therefore, Sakurai teaches the claimed limitation of “launching means for automatically launching either the print software or the read software”.

Conclusion

14. All claims are rejected.

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R.

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§ 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Wallerson whose telephone number is (703) 305-8581.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:

(703) 872-9314 (for formal communications intended for entry)

(for informal or draft communications, such as proposed amendments to be discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

Crystal Park Two
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MARK WALLERSON
PRIMARY EXAMINER



Mark Wallerson